

Date: Wednesday, 7/4/2007 3:51:52 PM
 User: Eric Charbonneau

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : UPPER AND LOWER PLATE
Job Number : 33303	
Estimate Number : 12838	
P.O. Number : N/A	Part Number : D3524041
This Issue : 7/4/2007	Drawing Number : UNDER REVIEW
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A	Drawing Revision : N/A
Previous Run : 32206	Material : N/A
Written By : <u>07/07/12</u>	Due Date : 7/11/2007
Checked & Approved By : <u>1</u>	Qty: 2 Um: Each
Comment : Est Rev: A New Issue 07-04-18 EC	PROTOTYPE

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	M6061T6B0375X03000	6061T6 BAR 375 X 3.00
Comment: Qty.: 0.3236 f(s)/Unit Total : 0.6472 f(s) 6061-T6 Bar 375" X 3.00" batch: <u>M18237</u>		
		<div style="border: 1px solid black; padding: 5px; text-align: center;"> CERTIFICATE OF CONFORMITY REQUIRED </div>
2.0	BAND SAW	BAND SAW
Comment: BAND SAW Cut blank 3.700 " long		
3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
Comment: HAAS CNC VERTICAL MACHINING #1 1- Mill as per Folio FA700 Rev: <u>AA</u> & Dwg D3524 Rev: <u>A</u> 2-Deburr per dwg D3443		
4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
Comment: INSPECT PARTS AS THEY COME OFF MACHINE		
5.0	QC8	SECOND CHECK
Comment: SECOND CHECK		

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: UPPER AND LOWER PLATE

Job Number: 33303

Part Number: D3524041

Job Number:



Seq. #:	Machine Or Operation:	Description :
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6.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1
C'SINK AS PER DWG D3524

MF 07-07-11

②

7.0

QC5

INSPECT WORK TO CURRENT STEP



CB
07.07.11

**ENGINEERING
APPROVAL**



MF 07-07-11

Comment: INSPECT WORK TO CURRENT STEP

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1
Chemical Conversion Coat as per QSI 005 4.1

N/A

9.0

MS21075L06

ANCHOR NUT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 8.0000 Each(s)
ANCHOR NUT
batch: M101807

10.0

MS20426AD34

RIVET



Comment: Qty.: 8.0000 Each(s)/Unit Total : 16.0000 Each(s)
RIVET
batch: M102404

MF 07-07-11

11.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1
RIVET NUT PLATESAS PER DWG D3524

MF 07-07-12

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SB 07/07/12

②

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Identify and Stock
Location: _____

FOR ENGINEERING USE ONLY

CB 07 07.19

Date: Wednesday, 7/4/2007 3:51:52 PM
User: Eric Charbonneau

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: UPPER AND LOWER PLATE

Job Number: 33303

Part Number: D3524041

Job Number:



Seq. #:

Machine Or Operation:

Description :

14.0

QC21

FINAL INSPECTION/W/O RELEASE



07.07.19

AD

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



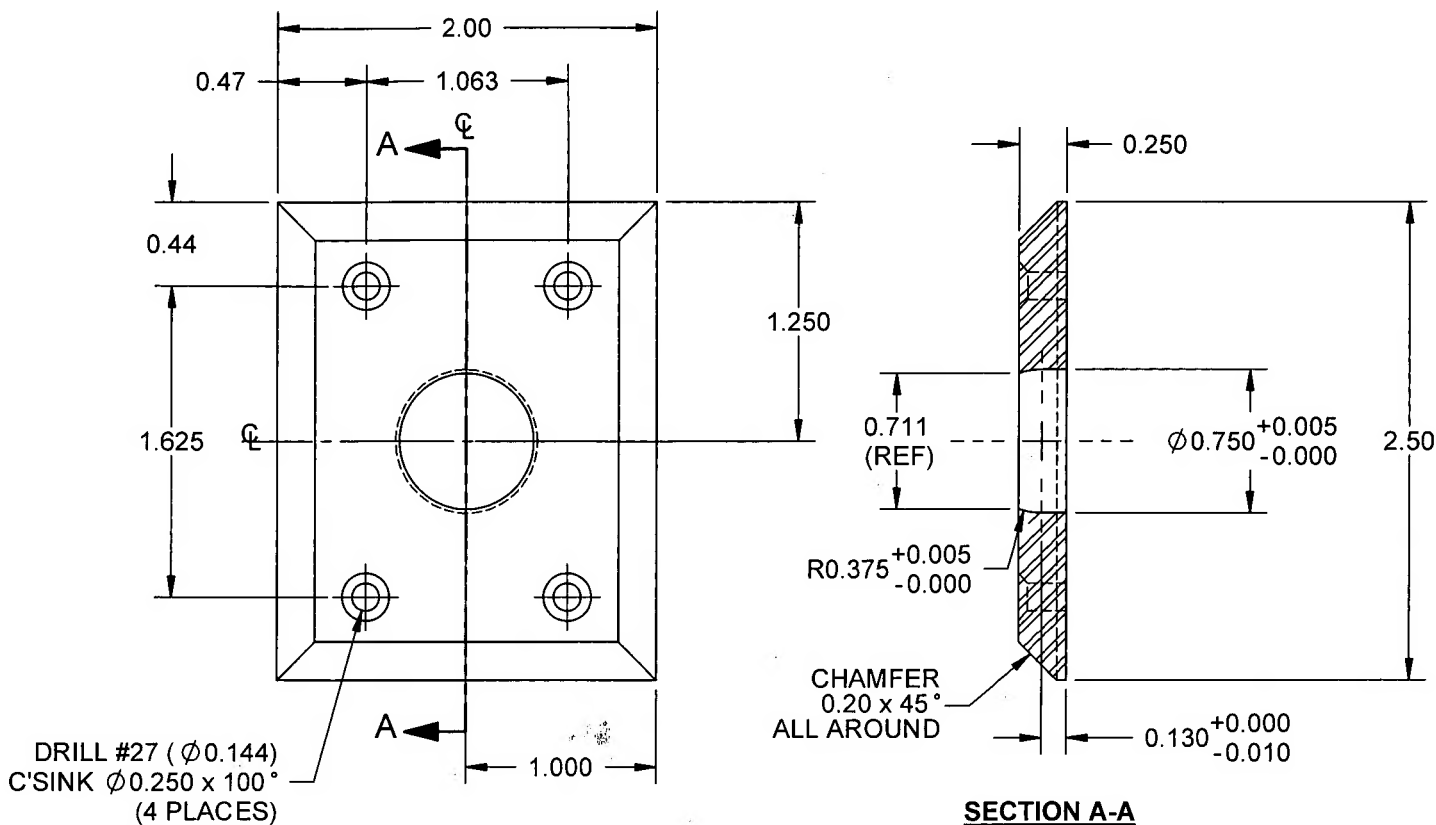
c 207/07/18

PROTOTYPE

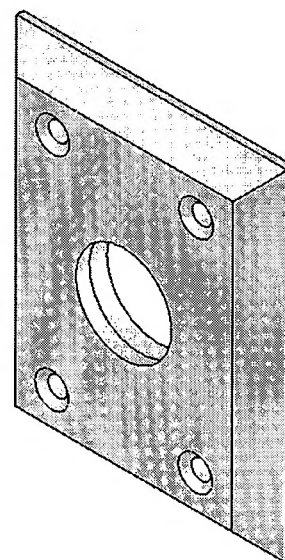
PLEASE RETURN ALL ISSUED
DATA TO ENGINEERING

07.07.10 CB

DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED CE	APPROVED	DRAWING NO. D3524	REV. A SHEET 1 OF 3
DATE 07.06.18		TITLE UPPER AND LOWER PLATE	SCALE 1:1
REV A	DATE 07.06.18	DESCRIPTION NEW ISSUE	



D3524-1 LOWER PLATE



NOTES:

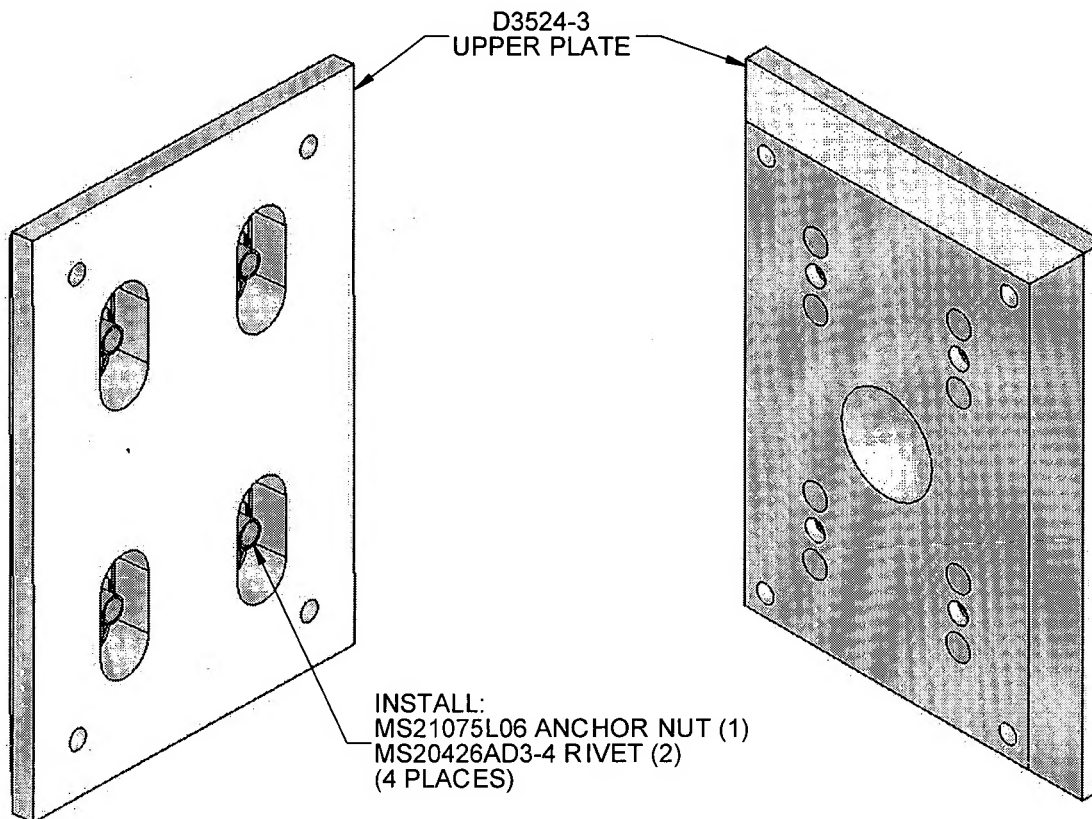
- 1) MATERIAL: ALUMINUM 6061-T6/T651/T6510/T6511/T62 BAR PER QQ-A-225/8 OR AMS 4115/4116/4117/4128 OR QQ-A-200/8 OR AMS 4160 (REF DART SPEC M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART SYMMETRIC ABOUT ϕ

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PROTOTYPE
 PLEASE RETURN ALL ISSUED
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 07.07.10 CB

DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED	DRAWING NO. D3524	REV. A SHEET 2 OF 3
DATE 07.06.18		TITLE UPPER AND LOWER PLATE	SCALE 1:1



D3524-041 UPPER PLATE ASSEMBLY

PARTS LIST:

QTY	P/N	DESCRIPTION
X	D3524-041	UPPER PLATE ASSEMBLY
1	D3524-3	UPPER PLATE
4	MS21075L06	ANCHOR NUT
8	MS20426AD3-4	RIVET

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PROTOTYPE

PLEASE RETURN ALL ISSUED
DATA TO ENGINEERING

07.07.18 CB

DESIGN	CB	DRAWN BY	CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	CE	APPROVED		DRAWING NO. D3524
DATE	07.06.18	TITLE	UPPER AND LOWER PLATE	REV. A SHEET 3 OF 3
		SCALE	2:3	

DRILL #40 ($\phi 0.098$)
C'SINK $\phi 0.185 \times 100^\circ$ OTHER SIDE
(8 PLACES)

DRILL #27
($\phi 0.144$)
(4 PLACES)

DRILL #30
($\phi 0.129$)
(4 PLACES)

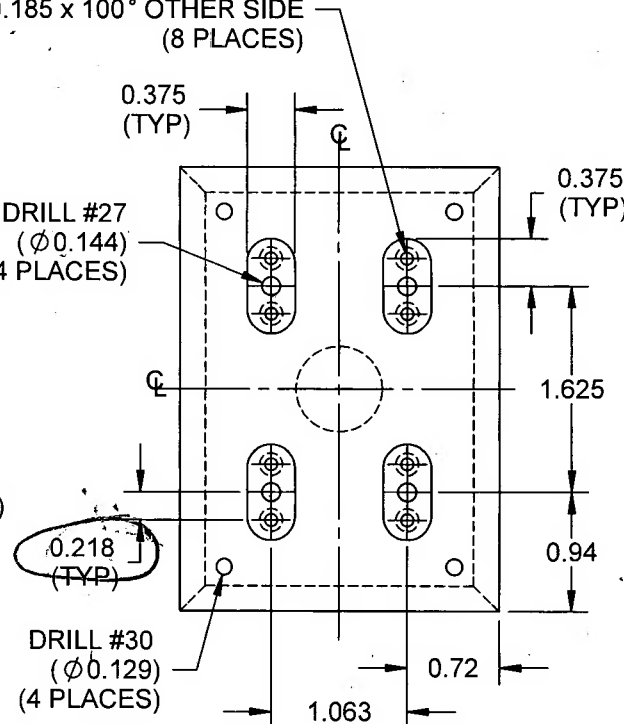
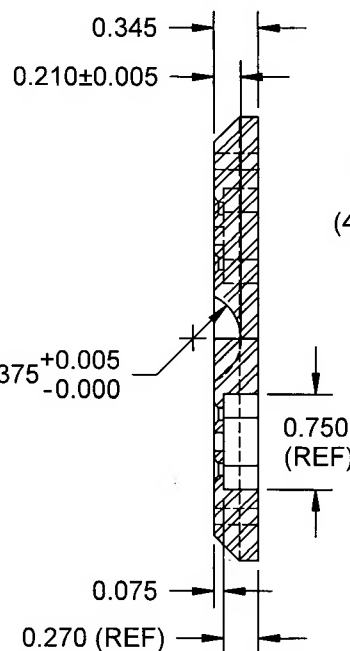
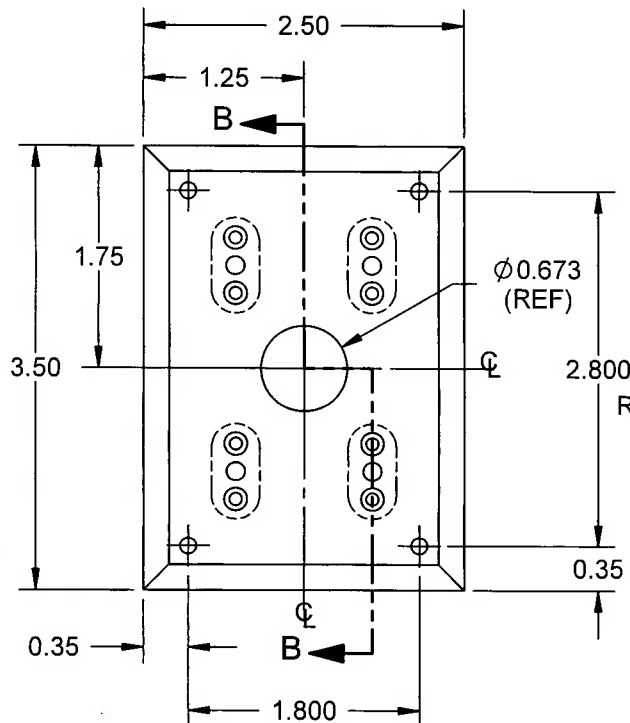
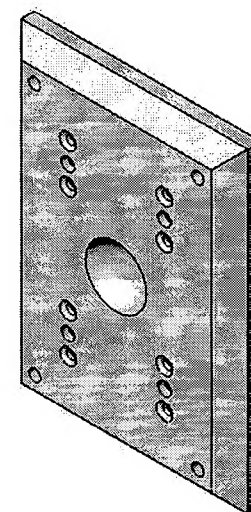
SECTION B-B

CHAMFER
0.20 x 45°
ALL AROUND

D3524-3 UPPER PLATE

NOTES:

- 1) MATERIAL: ALUMINUM 6061-T6/T651/T6510/T6511/T62 BAR PER QQ-A-225/8 OR AMS 4115/4116/4117/4128 OR QQ-A-200/8 OR AMS 4160 (REF DART SPEC M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI.005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART SYMMETRIC ABOUT ϕ



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DART AEROSPACE LTD		Work Order: 33303
Description: upper plate		Part Number: 03524-3
Inspection Dwg: 03524 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.50"	$\pm .030"$	2.501"	✓			
1.25"	$\pm .030"$	1.25"	✓			
1.75"	$\pm .030"$	1.75"	✓			
3.50"	$\pm .030"$	3.502"	✓			
.35"	$\pm .030"$	.346"	✓			
1.800"	$\pm .010"$	1.804"	✓			
.350"	$\pm .030"$	.353"	✓			
2.800"	$\pm .010"$	2.804"	✓			
Ø.673"	$\pm .010"$	Ø.675"	✓			
20x45°	$\pm .030"$	.200"	✓			
.270"	$\pm .010"$	.270"	✓			
.075"	$\pm .010"$	.075"	✓			
.210"	$\pm .005"$	.206"	✓			
Ø.098"	$\pm .004"$	Ø.098"	✓			
Ø.144"	$\pm .005"$	Ø.148"	✓			
.375"	$\pm .010"$	.374"	✓			
.375"	$\pm .010"$	.377"	✓			
1.625"	$\pm .010"$	1.629"	✓			
.94"	$\pm .030"$	.934"	✓			
.72"	$\pm .030"$	.720"	✓			
1.063"	$\pm .010"$	1.069"	✓			
Ø.129"	$\pm .005"$	Ø.129"	✓			
.218"	$\pm .010"$	.219"	✓			
.345"	$\pm .010"$	.345"	✓			

Measured by: J.F.
Date: 07/07/11

Audited by: SA
Date: 07.07.11

Prototype Approval: CB
Date: 07.07.11

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

Receiving Report

Date: 05/08/09
Supplier: Copper + Brass

Batch No: m18237
Dart P/O: 2008415

Packing Slip: Yes ☒ No ☐
Invoice: Yes ☐ No ☒
Receipt: Cash ☐ Cr. ☐

Release Note Attached: Yes ☒ No ☐ N/A ☐
Waybill Attached: Yes ☒ No ☐
Shipment Complete: Yes ☐ No ☒
Q.C. Inspection ☐

Discrepancies

Part No.	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
m6061T6B0.375X01.000		48	0	0	48	

TSR No. _____

Initials of receiver (if shipment OK) CL

Production/Admin:

Date: 05/08/10
Received/Costing: 2008415
Initial: A

Accounting:

Date: _____
AP/MR: _____
Initial: _____

H:\ISO9000\Forms\Purchase\RECREPORT rev B

SPECIAL INSTRUCTIONS

"Shipping, do not place any packages or goods on top of our material."

FULL		SCRAP		FILLED BY GM		PACKED BY		Q/A AUDIT	
CUSTOMER RECEIVING HOURS				MAX SKID WEIGHT		LOADING INSTRUCTIONS		MAXIMUM BUNDLE WEIGHT	
BOXES	BARS	CASES	CUSHP	PKGS	SKIDS	BCLS	TUBES	CTNS	FLAT
									1
INSPECTION RECORD									

TEST RESULTS

CERTIFICATE OF COMPLIANCE

We hereby certify that mercury or any of its compounds are not used in the processing and distribution of our products. The products we distribute are not hazardous in their received state. For MSDS sheets go to www.copperandbrass.com/msds or call 248-233-5682. We hereby certify that the material above complies with the following specifications:

ASTM-B221... AMS-QQ-A-200/8

TAG NO QUANTITY UOM VENDOR VEND PO HEAT/LOT
181934 00 31.00 LB ALCOA E 0C74914 629545-001

PCS : TAG NO QUANTITY UOM VENDOR VEND PO HEAT/LOT

PCS

SHIP DATE 08/09/05 SHP		GROSS WEIGHT 50		QUOTE 30-143875-2		OF 4		PACKING LIST	
AEROSPACE		WORK ORDER **		ORDER DATE 08/04/05 ORD		TEST RESULTS			
SHIP TO AEROSPACE 1270 ABERDEEN ST HAWKESBURY ON CANADA K6A 1K7		01		DELIVERY DATE 08/09/05 DEL		SHIP BRANCH 30-TOR		SELL BRANCH 30-TOR	
								WORK ORDER UV4618	
CUSTOMER P.O. NUMBER 2008415		TERRITORY 01		ENTRY ID 30MAC		6905 KENDERRY GATE, MISSISSAUGA ONTARIO, CANADA L5T 2Y			
BUYER LINDA LACELLE		INSIDE SALES MARIO A. CARREIRO		Copper and Brass Sales Canada A ThyssenKrupp Materials NA company ThyssenKrupp					
BUYER TELEPHONE (613) 632-9577		INSIDE SALES TELEPHONE (905) 696-8100 223		CUSTOMER SIGNATURE		DATE			
SHIP VIA		SHIPPING STATUS		QUANTITY		ORDERED		SHIPPED	
INTERNAL		COMPLETE X		INVENTORY		31.75 LB		31.00	
TO CUSTOMER COMMON/FRT-		PARTIAL		BILLING		24.00 LF		24.00	
BILL OF LADING		CANCEL		WAREHOUSE				2.00 PC	
		FOB DEST		PACKED WITH OTHER GOODS					
		FREIGHT STATUS PPD		FINISHED GOODS LOCATION					
PART DESCRIPTION				019914-1					
RECT 6061-T6511 EXTR ALUMINUM BAR, 3/8 (+/- .008) X 3 (+/- .024) X 12 FT ML NO PROCESSING - 144" ML, Test Results Attn to: QA Department. <i>065108109</i>									
SPECIAL INSTRUCTIONS									
"Shipping, do not place any packages or goods on top of our material."									
FULL		SCRAP		FILLED BY GM		PACKED BY		Q/A AUDIT	
CUSTOMER RECEIVING HOURS		MAX SKID WEIGHT		LOADING INSTRUCTIONS		MAXIMUM BUNDLE WEIGHT			
BOXES	BAR	CASES	CUSH	PKGS	SKIDS	BOLS	TUBES	CTNS	FLAT 1
INSPECTION RECORD									

TEST RESULTS

CERTIFICATE OF COMPLIANCE

We hereby certify that mercury or any of its compounds are not used in the processing and distribution of our products. The products we distribute are not hazardous in their received state. For MSDS sheets go to www.copperandbrass.com/msds or call 248-233-5682. We hereby certify that the material above complies with the following specifications:

ASTM-B221... AMS-QQ-A-200/8

TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS	TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS
I81934 00	31.00	LB	ALCOA E	0C74914	629545-001								

INSPECTION REPORT

MADE IN BRAZIL

N.: 120085402-001

N.: AS4043DI

STANDARD: 1

SHIP COPPER AND BRASS SALES (CA)
TO: 6905 KENDERRY GATE UNIT 4
MISSISSAUGA - ONTARIO
CANADA L5T 2Y8

We hereby certify that the material covered by this report has been inspected in accordance with, has been found to meet, the applicable requirements described herein, including any specifications forming accordance with, and part of the description that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Per WILKER L. PEREIRA

QUALITY CONTROL.

Item : 07

BC132

Item Description

ALUM FLAT BAR

Alloy : 6061

Temper : T6511

.375 3.000 .000 X 12 FT

CHEMICAL COMPOSITION

CAST	Si	Fe	Cu	Mn	Mg	Ti	Cr	Zn	V	B	Pb	Bi
19686	0.6300	0.2050	0.2670	0.0310	0.8900	0.0160	0.0440	0.0060	0.0086	0.0004	0.0032	

EXTRUDED SHAPES

N. OF TESTS:3

UTS (KSI)		TYS (KSI)		EL (%)								
Min	Max	Min	Max	Min	Max							
41.79	43.82	37.74	40.17	15.76	16.24							
UTS (KSI)	43.82	43.26	41.79									
TYS (KSI)	40.17	38.12	37.74									
EL (%)	16.24	16	15.76									

OBSERVATIONS

ITEM IDENTIFICATION:629545-001

ENCOMENDA ALCOA: 14881607(BC132)

P.O. CONSIG.: C74914